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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/031,681	06/27/2002	Robert Leydier	09669/019001	6281

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EXAMINER

KIM, AHSHIK

ART UNIT PAPER NUMBER

2876

DATE MAILED: 03/05/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/031,681	Applicant(s) LEYDIER, ROBERT	
	Examiner Ahshik Kim	Art Unit 2876	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 18 February 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-7 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-7 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Amendment

1. Receipt is acknowledged of the amendment filed on February 18, 2004. In the
5 amendment claims 1 and 7 were amended. Currently, claims 1-7 remain for examination.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the
basis for the rejections under this section made in this Office action:

10 A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed
in the United States before the invention by the applicant for patent or (2) a patent granted on an application for
patent by another filed in the United States before the invention by the applicant for patent, except that an
15 international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this
subsection of an application filed in the United States only if the international application designated the United
States and was published under Article 21(2) of such treaty in the English language.

3. Claims 1 and 5-7 are rejected under 35 U.S.C. 102(e) as being anticipated by Odinak (US
6,419,159).

20 Re claims 1 and 7, Odinak teaches a smart card 30 (col. 2, line 38 – col. 3, line 22)
comprising an integrated circuit 10 further comprising a micro controller 12, a plurality of
contacts (col. 2, lines 65+) to receive power and data from external sources, wherein the card
carries sensitive/confidential information (col. 1, lines 15+), and the power protection circuitry
40 performs power fluctuations during the operation so that important data may not be
25 compromised to unauthorized individual(s) (col. 3, lines 23-40).

Re claims 5, 6, the card is created according to the ISO-7816 standard (col. 3, lines 15+)
or utilizing the medium such as plastic, which provides necessary protection and rigidity for the

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card. Although not explicitly mentioned, the contacts need to be arranged so that they would interface with external devices.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 2-4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Odinak (US 6,419,159) in view of Basentsch (US 6,264,108). The teachings of Odinak have been discussed above.

Re claims 2 and 3, Odinak additionally discloses that a multiple number of current sinks 42(1) to 42(N) (see figure 1) connected between the power source Vcc and ground contacts are used in creating unpredictable power consumption levels (col. 3, lines 41+; col. 4, lines 19+).

However, Odinak fails to specifically teach or fairly suggest that a capacitor is connected between the supply terminal and another supply terminal.

Basentsch teaches an IC card comprising a shield for detecting an intrusion and a protection unit for controlling sensitive information (see abstract). The card further uses a capacitor 15 to maintain a certain voltage for a short period of time (col. 4, lines 38+).

In view of Basentsch's teaching, it would have been obvious to an ordinary skill in the art at the time the invention was made to employ well-known capacitor to the teachings of Odinak in order to provide flexibility in controlling the voltage level. It is well known that capacitors are

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used in IC chip embodiment to temporarily hold or adjust the voltage. In fact, source-to-drain 46 in each current sinks 42 (1),, 42 (N) can very well be a capacitor. Accordingly, utilizing capacitors in IC chip to adjust voltage as shown by Basentsch would have been an obvious expedient, well within the ordinary skill in the art.

5 Re claims 4, farad is a unit of capacitance for capacitors. Accordingly, one would choose a capacitor of a particular capacity, which suit his/her system. For example, signal to noise ratio is relatively large, capacitors for large voltage may be selected. In opposite cases, small capacitors may be required. Since capacitors are already disclosed in IC chip, unit of capacitors alone would not be a patentable subject matter unless Applicant clearly shows why claimed
10 capacitors are patentable over other capacitors.

Response to Arguments

6. Applicant's amended claims and arguments filed on February 18, 2004 have been fully considered, but they are not persuasive.

15 Applicant amended the independent claims 1 and 7 such that the claim 1 now reads "A portable object of smartcard type, comprises: a microcontroller comprising a part to carry out data processing, the data comprising confidential information; an interface circuit through which the part to carry out data processing receives a supply voltage, said interface circuit being designed to vary the supply voltage of the part to carry out data processing by modulating the
20 electrical couple between the contact stud and the part to carry out data processing in order to secure said confidential data against current attacks. In doing so, Applicant argues that the subject matter now claimed in the instant application is patentably distinguishable over the cited prior arts.

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Examiner carefully considered amended claims and Applicant's position, however, it is Examiner's view that the Odinak patent still teaches amended claims. Odinak clearly indicates the information guarded against pirating or the power analysis attack is private and confidential (col. 2, lines 48-64). The device 10 contains I/O contacts (col. 2, lines 65+) for receiving power
5 from the external sources. The device further contains power analysis protection circuitry 40 which further comprises a multiple current sinks (42(1). 42(N)) are connected between Vcc and Gnd to adjust the voltages (col. 3, lines 31+). The current sinks 42(1)-42(N) consume power at different rates (col. 4, lines 9+).

Modulate is defined as, among other things, to adjust to or keep in proper measure or
10 proportion; to vary the amplitude, frequency, or phase of (a carrier wave or light wave) (see Merriam-Webster's Collegiate Dictionary, 10th edition). Power analysis protection circuitry 40 as a whole or individual current sinks 42(1).....42(N) are modulating the current to cloak the power level when the card is ordinarily used.

The amended claims and remarks describing these elements have been fully considered,
15 but they are not persuasive, and therefore, the Examiner has made this Office Action final.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time
20 policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO

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MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ahshik Kim whose telephone number is (571)272-2393. The examiner can normally be reached between the hours of 6:00AM to 3:00PM Monday thru Friday. The fax number directly to the Examiner is (571)273-2393.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael G. Lee, can be reached on (571)272-2398. The fax phone number for this Group is (703)872-9306.

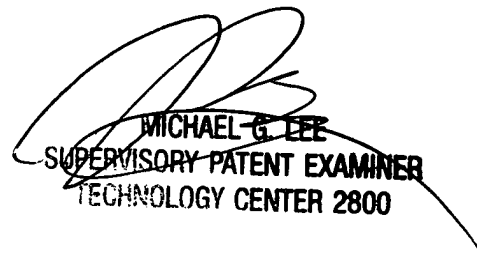
Communications via Internet e-mail regarding this application, other than those under 35 U.S.C. 132 or which otherwise require a signature, may be used by the applicant and should be addressed to [ahshik.kim@uspto.gov].

All Internet e-mail communications will be made of record in the application file. PTO employees do not engage in Internet communications where there exists a possibility that sensitive information could be identified or exchanged unless the record includes a properly signed express waiver of the confidentiality requirements of 35 U.S.C. 122. This is more clearly set forth in the Interim Internet Usage Policy published in the Official Gazette of the Patent and Trademark on February 25, 1997 at 1195 OG 89.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 308-0956.



Ahshik Kim
Patent Examiner
Art Unit 2876
March 1, 2004



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